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December 29, 1958

Dear Dan:

Pursuant to our telephone conversation, this letter constitutes the proposal for modifications to the F Rack, Event-Marker Equipment.

25X1A

The event-marker equipment, known as the F rack of the data reduction system, incorporated a strip chart recorder using [REDACTED] current-sensitive paper as the recording medium. Details for the chart recorder were obtained from the manufacturer of the chart paper. Many problems were encountered during the design of this recorder, and the [REDACTED] was consulted on numerous occasions. The basic problem encountered was that the event marks were not well defined and smeared into each other when 10-second event marks were applied to the recorder. [REDACTED] insisted that the techniques were in error and this company solicited their assistance, and some parts were supplied directly by [REDACTED]. In May 1958, literature was released by [REDACTED] explaining three new patents that alleviate basic faults in the previous deposit method of recording. Their patents arrive at a solution to our problem and utilize a drive motor, a ground plate, and a series of rotating spirals. The recording process is programmed. A fixed pen is replaced by a band of metal functioning in conjunction with a second motor and idler on the opposite side of the chart paper. This patented mechanism requires approximately twice the room of the original design suggested by [REDACTED].

With the concurrence of customer technical representatives, it was deemed advisable to suspend design effort on the chart recorder and consider utilizing event marks and timing voltages obtained from the event marker to drive auxiliary chart recorders already available at analysis centers. Following are the changes required to remove the unsatisfactory chart recorder and provide an output for auxiliary recorders.

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1. Removal of chart recorders. Existing recorders are to be credited to the stock of Government furnished equipment.
2. A circuit change consisting of a summing network is to be incorporated in order to provide a single output consisting of 10-second, 1-minute, 10-minute and 1-hour timing voltages.
3. The circuit changes are to be mounted on a circuit board utilizing a portion of the space previously occupied by the chart recorder.
4. A front panel will be installed in the space previously occupied by the chart recorder. The front panel will have an output connector and will be marked "Time-Mark Output".

As sufficient funds presently exist in the contract for this proposed modification, no additional funding will be required.

In accordance with our telephone conversation, I assume that this modification meets with your approval should your technical people concur. Thus, we will proceed with the proposed work only after Paul has been notified by your technical people of their approval.

Sincerely,



Jack

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